

L Number	Hits	Search Text	DB	Time stamp
1	850	cotton same agrobacterium	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/09/27 17:13
2	58	(cotton same agrobacterium) and petiole	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/09/27 17:13

SESSION RESUMED IN FILE 'BIOSIS, AGRICOLA, CAPLUS, CABA'

AT 17:03:45 ON 27 SEP 2004

=> s cotton and transform? and agrobacterium

L7 362 COTTON AND TRANSFORM? AND AGROBACTERIUM

=> s 17 and petiole

L8 2 L7 AND PETIOLE

=> d ti 1-2

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

TI Obtaining insect-resistant transgenic sweet pepper **transformed** with modified CptI gene (sck)

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

TI High-efficiency **agrobacterium**-mediated **transformation** of **cotton** using **petiole** explants

=> s 17 and py<1999

2 FILES SEARCHED...

L9 167 L7 AND PY<1999

=> duplicate remove 19

L10 122 DUPLICATE REMOVE L9 (45 DUPLICATES REMOVED)

=> d ti 1-30

L10 ANSWER 1 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

TI Production of hydroxylated fatty acids in genetically modified plants, especially oil-producing plant transgenesis using fatty acid hydroxylase gene

L10 ANSWER 2 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

TI **Transformation** and regeneration of fertile **cotton** plants

L10 ANSWER 3 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

TI Using enzymes of carotenoid biosynthesis to alter the carotenoid content and fatty acid profile of seeds

L10 ANSWER 4 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

TI Mol. genetic methods for reducing expression variability of transgenes in transgenic plant cells

L10 ANSWER 5 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

TI The promoter (FLt) for the full-length transcript of peanut chlorotic streak caulimovirus (PClSV)

L10 ANSWER 6 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

TI Hormone-free embryogenesis and **transformation** of **cotton**

L10 ANSWER 7 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

TI Isolation, sequence, and use of raspberry promoters dru110 and dru259 for expression of transgenes for herbicide resistance in transgenic plants

L10 ANSWER 8 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

TI Regeneration of genetically modified whole plant from plant cell transfected with DNA sequence comprising regulatory regions and genes for phenotype-regulating protein, recombinase, and genetic repressor

L10 ANSWER 9 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

TI Leaf-specific expression of genes in transgenic plants

L10 ANSWER 10 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on

TI Monocot and Dicot **transformation** using **Agrobacterium** tumefaciens and the shoot apex.

L10 ANSWER 11 OF 122 CABA COPYRIGHT 2004 CABI on STN

TI **Cotton** variety and bacterial strain interactions during agrobacteria-based genetic **transformation**.

L10 ANSWER 12 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on

TI Culture of transgenic Artemisia annua hairy root with **cotton** cadinene synthase gene.

L10 ANSWER 13 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on

TI Five avirulence genes from Xanthomonas campestris pv. malvacearum cause genotype-specific cell death when expressed transiently in **cotton**

L10 ANSWER 14 OF 122 AGRICOLA Compiled and distributed by the National

Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.  
(2004) on STN

TI Introduction of pathogen resistance factors in to **cotton** and tobacco by genetic **transformation**.

L10 ANSWER 15 OF 122 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.  
(2004) on STN

TI Localization of transgenes inserted into **cotton**, *Gossypium hirsutum* L., via **agrobacterium** *tumefaciens* **transformation**.

L10 ANSWER 16 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI Sonication effects and transient gene expression following **Agrobacterium transformation**.

L10 ANSWER 17 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3  
TI Expression of a promoter from a fiber-specific acyl carrier protein gene in transgenic **cotton** plants

L10 ANSWER 18 OF 122 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.  
(2004) on STN DUPLICATE 4  
TI Adaptation of **cotton** shoot apex culture to **Agrobacterium**-mediated **transformation**.

L10 ANSWER 19 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI Obtaining transgenic **cotton** plants with cowpea trypsin inhibitor.

L10 ANSWER 20 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Evaluation of transgenic approach to reduce gossypol in cottonseed.

L10 ANSWER 21 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Transient expression of pthN2 in **cotton** leaves infiltrated with an asymptomatic angular leaf spot strain elicits water soaking.

L10 ANSWER 22 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Genetic **transformation** of the **cotton** (*Gossypium hirsutum*) shoot apex by **Agrobacterium** *tumefaciens*

L10 ANSWER 23 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI A rapid in vitro regeneration scheme for **cotton** plants that is compatible with **Agrobacterium**-mediated **transformation**

L10 ANSWER 24 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI A plant nuclear scaffold attachment region which increases gene expression

L10 ANSWER 25 OF 122 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.  
(2004) on STN  
TI Genetic **transformation** of the **cotton** (*Gossypium hirsutum* L.) shoot apex by **Agrobacterium** *tumefaciens*.

L10 ANSWER 26 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI Attack of leaf curl virus on **cotton** crop in Pakistan. Genetic engineering approaches to develop transgenic **cotton** resistant to leaf curl virus.

L10 ANSWER 27 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Engineering stress tolerance in transgenic plants.

L10 ANSWER 28 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI The extent to which external oxygen transfer limits growth in shake flask culture of hairy roots.

L10 ANSWER 29 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI **Transformation** of Texas cultivars.

L10 ANSWER 30 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI Plantlet regeneration coupled with **Agrobacterium**-mediated **transformation**.

=> d bib abs 30 23 22 2 6

L10 ANSWER 30 OF 122 CABA COPYRIGHT 2004 CABI on STN  
AN 1998:72181 CABA

DN 19981604992  
TI Plantlet regeneration coupled with **Agrobacterium**-mediated transformation  
AU Hemphill, J. K.; Hoang Chau; Wenske, M.; Daily, M.; Zimmerman, C.; Chapman, K. D.; Hoang, C.  
CS Cottonseed Development Group, Department of Biological Sciences, University of North Texas, Denton, TX, USA.  
SO 1997 Proceedings Beltwide Cotton Conferences, New Orleans, LA, USA, January 6-10, 1997: Volume 1, (1997) pp. 456-457. 5 ref.  
Publisher: National Cotton Council. Memphis  
Meeting Info.: 1997 Proceedings Beltwide Cotton Conferences, New Orleans, LA, USA, January 6-10, 1997: Volume 1.  
CY United States  
DT Conference Article  
LA English  
ED Entered STN: 19980512  
Last Updated on STN: 19980512  
AB Co-cultivation of pre-existing **cotton** (*Gossypium*) meristems in vitro with **Agrobacterium** resulted in the formation of transgenic plants. **Transformation** was confirmed by GUS activity assays, and this was also confirmed in progenies of **transformants**.

L10 ANSWER 23 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1997:757135 CAPLUS  
DN 128:31082  
TI A rapid in vitro regeneration scheme for **cotton** plants that is compatible with **Agrobacterium**-mediated **transformation**  
IN Chapman, Kent D.; Hemphill, John K.; Maier, Camelia G. A.  
PA University of North Texas, USA  
SO PCT Int. Appl., 60 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9743430	A1	19971120	WO 1997-US8242	19970515 <--
			W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	
			RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG	
AU 9730075	A1	19971205	AU 1997-30075	19970515 <--
PRAI US 1996-648775		19960516		
		WO 1997-US8242	19970515	

AB This invention relates to a versatile method of rapidly regenerating **cotton** plants from explants of apical and or nodal meristematic tissues which can be coupled with well known methods of **transformation** such as **Agrobacterium**-mediated **transformation** for the rapid production of genetically-engineered **cotton** varieties of agronomic importance. The regeneration system provides the capability to introduce genes directly into cultivars of com. important **cotton** varieties both rapidly and efficiently. The method relates to **cotton** plants produced using the described procedure, seeds produced from these plants, and **cotton** plants germinated from these seeds. Thus, explants from a per-existing meristem are induced to proliferate by culturing in nutrient media supplemented with a cytokinin such as 0.3  $\mu$ M benzyladenine. The resulting second shootlet is then rooted and used to produce the **cotton** plant and seeds. The **Agrobacterium** tumefaciens-mediated **transformation** system utilizes an antibiotic such as kanamycin and a antibiotic resistance gene (such as the NPTII gene) in its selection system. The methods can also be used to regenerate and/or **transform** and regenerate dicotyledons other than **cotton**.

L10 ANSWER 22 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1998:216220 CAPLUS  
DN 128:256876  
TI Genetic **transformation** of the **cotton** (*Gossypium hirsutum*) shoot apex by **Agrobacterium** tumefaciens  
AU Zapata Carrero, Carmen Cecilia  
CS Texas A and M Univ., College Station, TX, USA  
SO (1997) 90 pp. Avail.: UMI, Order No. DA9815869  
From: Diss. Abstr. Int., B 1998, 58(11), 5709  
DT Dissertation  
LA English  
AB Unavailable

L10 ANSWER 2 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:239283 CAPLUS  
DN 128:266950  
TI **Transformation** and regeneration of fertile **cotton**  
plants  
IN Trolinder, Norma L.; Dever, Jane Gay Kveton; Koonce, Linda Kay Trolinder  
PA Southplains Biotechnologies Inc., USA; Trolinder, Norma L.; Dever, Jane  
Gay Kveton; Koonce, Linda Kay Trolinder  
SO PCT Int. Appl., 36 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9815622	A1	19980416	WO 1997-US18314	19971010 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	ZA 9709072	A	19980423	ZA 1997-9072	19971009 <--
	AU 9749812	A1	19980505	AU 1997-49812	19971010 <--
	US 5986181	A	19991116	US 1997-948574	19971010
	EG 20986	A	20000830	EG 1997-1059	19971011
PRAI	US 1996-28559P	P	19961010		
	US 1996-29493P	P	19961031		
	WO 1997-US18314	W	19971010		

AB A method for in vitro regeneration of fertile **Gossypium** plants is provided in which cells from the transition region tissue of seedlings is excised and cultured. The transition region tissue of **cotton** seedlings extends from the uppermost portion of the root and into the hypocotyl region. **Transformed** cells are regenerated into homogeneously **transformed** plants by means of somatic embryogenesis on hormone-free medium. A method for production of transgenic **Gossypium** plants capable of transmitting a foreign gene to progeny is also described in which cells derived from the transition region tissue of seedlings are targeted for **transformation**. The method increases the number of different **cotton** genotypes that can be used to make stably **transformed** plants capable of transmitting the foreign gene to progeny. Suitable **Gossypium** species include *barbadense* and *hirsutum*. Expression vectors containing foreign genes and selectable marker genes of bacterial origin (e.g., for antibiotic resistance) are introduced into **cotton** explants by **Agrobacterium**-mediated **transformation**. The foreign genes may encode enzyme inhibitors, venoms, insect toxins, or proteins conferring resistance to pests, disease, or plant pathogens.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1998:788717 CAPLUS  
DN 130:48295  
TI Hormone-free embryogenesis and **transformation** of **cotton**  
IN Strickland, Steven G.  
PA Calgene, Inc., USA  
SO U.S., 9 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5846797	A	19981208	US 1995-539176	19951004 <--
PRAI	US 1995-539176		19951004		

AB A method is provided for regenerating **cotton** plants from explant tissue. The improved method allows the generation of embryogenic callus from a **cotton** tissue explant which is not cultivated on **cotton** initiation media having exogenous plant hormones. The method can be utilized in the **transformation** of **cotton** plants, by cutting **cotton** tissue to form an explant, co-cultivating the **cotton** explant tissue with **Agrobacterium** comprising a DNA sequence of interest, and culturing the co-cultivated explant on **cotton** initiation media comprising a selective agent but having no exogenous plant hormones. In this fashion **transformed** cells are induced to produce embryogenic callus on hormone-free selective media.

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ti 31-50

L10 ANSWER 31 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI Evaluation of novel **transformation** systems for **cotton**.

L10 ANSWER 32 OF 122 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN DUPLICATE 5

TI Shoot apex **transformation** of **cotton** using **Agrobacterium**.

L10 ANSWER 33 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI Field evaluation of **cotton transformed** for tolerance to imidazolinone herbicides.

L10 ANSWER 34 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Genotype-independent **transformation/regeneration** of maize, **cotton** and pines using **Agrobacterium**.

L10 ANSWER 35 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
STN DUPLICATE 6  
TI Introduction of new traits into **cotton** through genetic engineering: Insect resistance as example.

L10 ANSWER 36 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI **Agrobacterium** mediated **transformation** of Sri Sumrong 60, a Thai **cotton** variety.

L10 ANSWER 37 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Gene transfering in *Gossypium hirsutum*

L10 ANSWER 38 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI Studies on **cotton** genetic **transformation** and plant regeneration.

L10 ANSWER 39 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Modification of plant lipids and seed oils utilizing yeast SLC genes encoding sn-2 acyltransferases

L10 ANSWER 40 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Aldehyde dehydrogenase selectable markers for plant **transformation**

L10 ANSWER 41 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Production of hydroxylated fatty acids in genetically modified plants, especially oil-producing plant transgenesis using fatty acid hydroxylase gene

L10 ANSWER 42 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Regeneration of genetically modified whole plant from plant cell transfected with DNA sequence comprising regulatory regions and genes for phenotype-regulating protein, recombinase, and genetic repressor

L10 ANSWER 43 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI Glyphosate-tolerant **cotton**: the composition of the cottonseed is equivalent to that of conventional cottonseed.

L10 ANSWER 44 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Glyphosate-tolerant **cotton**: Genetic characterization and protein expression.

L10 ANSWER 45 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Analysis of expressed proteins in fiber fractions from insect-protected and glyphosate-tolerant **cotton** varieties.

L10 ANSWER 46 OF 122 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Herbicide-resistant Acala and Coker cottons **transformed** with a native gene encoding mutant forms of acetohydroxyacid synthase.

L10 ANSWER 47 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI An improvement of selective medium for the genetic **transformation**

L10 ANSWER 48 OF 122 CABA COPYRIGHT 2004 CABI on STN  
TI Pollen dispersal from two field trials of transgenic **cotton** in the Namoi Valley, Australia.

L10 ANSWER 49 OF 122 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Nematicidal lectins of Amaryllidaceae, Alliaceae, or Vicieae for control of nematode infestation of plants

L10 ANSWER 50 OF 122 CABA COPYRIGHT 2004 CABI on STN

TI Breeding strategies for development of transgenic BXN[trade] cotton.

=> d bib abs 31

L10 ANSWER 31 OF 122 CABO COPYRIGHT 2004 CABI on STN  
AN 1998:72180 CABO  
DN 19981604991  
TI Evaluation of novel **transformation** systems for **cotton**  
AU Song Ping; Dang, P. M.; Allen, R. D.; Song, P.  
CS Plant Molecular Biology Laboratory, Department of Biological Sciences,  
Texas Tech University, Lubbock, TX, USA.  
SO 1997 Proceedings Beltwide Cotton Conferences, New Orleans, LA, USA,  
January 6-10, 1997: Volume 1, (1997) pp. 454-456. 5 ref.  
Publisher: National Cotton Council. Memphis  
Meeting Info.: 1997 Proceedings Beltwide Cotton Conferences, New Orleans,  
LA, USA, January 6-10, 1997: Volume 1.  
CY United States  
DT Conference Article  
LA English  
ED Entered STN: 19980512  
Last Updated on STN: 19980512  
AB An attempt was made to adapt a procedure that is widely used for  
**transformation** of *Arabidopsis thaliana* for use with **cotton**  
(*Gossypium*). Using the method, which involves the direct infiltration of  
**Agrobacterium** cells carrying the Bar gene, which provides  
resistance to Basta [glufosinate], into developing flowers, several  
putatively **transformed cotton** plants were obtained  
which were resistant to the herbicide. Preliminary molecular analysis  
indicated that the plants also contained the foreign gene construct.  
Offspring from the plants also contained the foreign DNA and were  
herbicide resistant. Though not conclusive, these results indicate that,  
with further development, the direct flower infiltration  
**transformation** method could be a valuable tool for genetic  
engineering of **cotton**.

=> s l10 and (leaf or leaves)

L11 27 L10 AND (LEAF OR LEAVES)

=> d ti 1-27

L11 ANSWER 1 OF 27 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Culture of transgenic *Artemisia annua* hairy root with **cotton**  
cadinene synthase gene.

L11 ANSWER 2 OF 27 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Transient expression of pthN2 in **cotton leaves**  
infiltrated with an asymptomatic angular **leaf** spot strain  
elicits water soaking.

L11 ANSWER 3 OF 27 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Five avirulence genes from *Xanthomonas campestris* pv. *malvacearum* cause  
genotype-specific cell death when expressed transiently in **cotton**

L11 ANSWER 4 OF 27 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Glyphosate-tolerant **cotton**: Genetic characterization and protein  
expression.

L11 ANSWER 5 OF 27 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI EXPRESSION OF A BACTERIAL GENE IN TRANSGENIC TOBACCO PLANTS CONFERS  
RESISTANCE TO THE HERBICIDE 2 4-D.

L11 ANSWER 6 OF 27 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI **TRANSFORMATION** OF **LEAF** DISCS OF TOBACCO AND  
**COTTON** AND POTATO TUBER SLICES USING A BINARY  
**AGROBACTERIUM** VECTOR SYSTEM.

L11 ANSWER 7 OF 27 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI INHERITANCE AND EXPRESSION OF GENES FOR KANAMYCIN AND CHLORAMPHENICOL  
RESISTANCE IN TRANSGENIC **COTTON** PLANTS.

L11 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI **Leaf**-specific expression of genes in transgenic plants

L11 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI The promoter (FLt) for the full-length transcript of peanut chlorotic  
streak caulimovirus (PCCSV)

L11 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Chemistry and biological activity of glycosides from *medicago sativa*.

L11 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI 2,4-D resistant transgenic **cotton** plants produced by  
**Agrobacterium**-mediated gene transfer

L11 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Genetic **transformation** of crop plants using microprojectile  
bombardment

L11 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Glyphosate tolerant plants carrying genes for heterologous class II  
5-enolpyruvylshikimate-3-phosphate synthases

L11 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Molecular cloning and use of benzenesulfonamide-inducible plant promoters

L11 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Fungal pathogen-tolerant transgenic plants expressing high levels of  
chitinase

L11 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Transgenic plants resistant to sulfonyl urea herbicides

L11 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Method for **transforming** plants via shoot apices derived from  
seedlings or axillary buds

L11 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Process for controlling plant pests using recombinant proteinase inhibitor  
genes

L11 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Production of glyphosate-tolerant 5-enolpyruvyl-3-phosphoshikimate (EPSP)  
synthases by recombinant DNA technology

L11 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Cloning of *Bacillus thuringiensis* tenebionis toxin gene and its use in  
producing coleoperan insect-resistant plants

L11 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Genetic modification of plants

L11 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Opine synthesis in wild-type plant tissue

L11 ANSWER 23 OF 27 CABA COPYRIGHT 2004 CABI on STN  
TI **Transformation** of Texas cultivars.

L11 ANSWER 24 OF 27 CABA COPYRIGHT 2004 CABI on STN  
TI Attack of **leaf** curl virus on **cotton** crop in Pakistan.  
Genetic engineering approaches to develop transgenic **cotton**  
resistant to **leaf** curl virus.

L11 ANSWER 25 OF 27 CABA COPYRIGHT 2004 CABI on STN  
TI Cloning and analysis of some plant genes.

L11 ANSWER 26 OF 27 CABA COPYRIGHT 2004 CABI on STN  
TI Integration and expression of foreign genes in the genome of  
**cotton**.

L11 ANSWER 27 OF 27 CABA COPYRIGHT 2004 CABI on STN  
TI **Transformation** of **leaf** blades of **cotton**  
(*Gossypium arboreum*) by means of a binary vector system.

=> d bib abs 27 12

L11 ANSWER 27 OF 27 CABA COPYRIGHT 2004 CABI on STN  
AN 88:120042 CABA  
DN 19881674459  
TI **Transformation** of **leaf** blades of **cotton**  
(*Gossypium arboreum*) by means of a binary vector system  
AU Kuznetsova, N. N.; Fedorova, O. E.; Nuridzhanyants, S. S.; Dzhataev, S.  
A.; Abdurakimov, A.; Skryabin, K. G.; Sadykov, A. S.  
SO Doklady Akademii Nauk Uzbekskoi SSR, (1987) No. 8, pp. 49-51. 7  
ref.  
Secondary Source: Referativnyi Zhurnal (1988) 3.65.5  
DT Journal  
LA Russian  
ED Entered STN: 19941101  
Last Updated on STN: 19941101  
AB A strain of **Agrobacterium tumefaciens** proved capable of inducing

the development of tumorous tissue on **leaf** discs. A gene for neomycin phosphotransferase was transferred from a bacterial vector and expressed in the plant cells.

L11 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1993:33589 CAPLUS  
DN 118:33589  
TI Genetic **transformation** of crop plants using microprojectile bombardment  
AU Christou, Paul  
CS Agracetus Inc., Middleton, WI, 53562, USA  
SO Plant Journal (1992), 2(3), 275-81  
CODEN: PLJUED; ISSN: 0960-7412  
DT Journal; General Review  
LA English  
AB A review with 49 refs. Development of procedures in cell biol. to regenerate plants from single cells and organized tissue, and the discovery of novel techniques to transfer genes to plant cells provided the prerequisite for the practical use of genetic engineering in crop improvement. These advances have given us the opportunity to create, characterize and select plant cultivars which could not be obtained by traditional breeding methods. Genetic engineering of such recalcitrant crops as maize (Fromm et al., 1990; Gordon-Kamm et al., 1990), rice (Christou et al., 1991; Datta et al., 1990; Toriyama et al., 1988), **cotton** (McCabe and Martinell, 1991; Umbeck et al., 1987), and soybean (Christou et al., 1990; McCabe et al., 1988) is now possible and in some cases routine. Soybean and **cotton** plants, highly resistant to com. herbicides and insect pests, will be some of the first agricultural com. products of recombinant DNA technol. These plants are expected to be in the market well before the end of this decade (Cutler, 1991). Potrykus (1990) developed a model in an attempt to explain why some species are more recalcitrant to in-vitro manipulation and **transformation** than others. He postulated that the relative ease with which **Agrobacterium** may **transform** certain dicotyledonous plants is likely due to the wound response these species exhibit. Such a response is absent from most monocotyledonous plants, making the latter very difficult to infect. It is important that any given DNA delivery method should be able to target as many competent cells as possible; in addition, it would be advantageous to develop ways to maximize the nos. of such cells. Commonly used **transformation** vectors, e.g. **Agrobacterium tumefaciens**, suffer from severe host specificity which limit the scope of their use. Selectable markers developed to permit preferential growth of engineered cells are only effective in systems involving fully dedifferentiated tissue. Attempts to select organized tissue have not met with much success, with the notable exception of **leaf-disk transformation** of certain Solanaceous plants (Horsch et al., 1985). Regeneration of intact plants from **transformed** tissue is not always an easy task. In a number of systems it is quite straightforward to engineer tissue that is not competent for regeneration (Christou et al., 1987). Addnl. barriers include tissue culture-induced variation, time factors for the recovery of **transformants**, labor intensive protocols, and limitations in regenerating plants from protoplast, callus and suspension cultures it would be advantageous therefore, to develop efficient **transformation** methodol. which would allow recovery of transgenic plants without the above constraints.

=> logoff hold  
STN INTERNATIONAL SESSION SUSPENDED AT 17:12:32 ON 27 SEP 2004

FILE 'HOME' ENTERED AT 13:20:45 ON 28 SEP 2004

=> file biosis agricola caplus caba  
=> s cotton and regen? and (asparagine or glutamine)  
L1 12 COTTON AND REGEN? AND (ASPARAGINE OR GLUTAMINE)

=> d ti 1-12

L1 ANSWER 1 OF 12 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI Callus induction, somatic embryoid formation and plant  
**regeneration** in **cotton** (*Gossypium hirsutum* L.).

L1 ANSWER 2 OF 12 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
TI PLANT **REGENERATION** FROM SOMATIC EMBRYOGENIC SUSPENSION CULTURES  
OF **COTTON GOSSYPIUM-HIRSUTUM** L.

L1 ANSWER 3 OF 12 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on

TI SOMATIC EMBRYOGENESIS FROM CELL CULTURES OF MEDICAGO-SATIVA 2. THE  
INTERACTION OF AMINO-ACIDS WITH AMMONIUM.

L1 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
TI High-efficiency agrobacterium-mediated transformation of **cotton**  
using petiole explants

L1 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Callus induction, somatic embryoid formation and plant  
**regeneration** in **cotton** (*Gossypium hirsutum* L.)

L1 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Transgenic plants engineered for improved nitrogen metabolism/assimilation  
using vectors containing inducible promoters for recombinant expression of  
enzymes

L1 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Carbon dioxide exchange and photosynthetic carbon metabolism in  
**cotton** leaves under conditions of depressed export of assimilates

L1 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Somatic embryogenesis from cell cultures of *Medicago sativa* L. II. The  
interaction of amino acids with ammonium

L1 ANSWER 9 OF 12 CABA COPYRIGHT 2004 CABI on STN  
TI Callus induction, somatic embryoid formation and plant  
**regeneration** in **cotton** (*Gossypium hirsutum* L.).

L1 ANSWER 10 OF 12 CABA COPYRIGHT 2004 CABI on STN  
TI Somatic embryogenesis of an early **cotton** cultivar.

L1 ANSWER 11 OF 12 CABA COPYRIGHT 2004 CABI on STN  
TI Studies on *Gossypium* distant hybrid ovule culture in vitro.

L1 ANSWER 12 OF 12 CABA COPYRIGHT 2004 CABI on STN  
TI Plant **regeneration** from somatic embryogenic suspension cultures  
of **cotton** (*Gossypium hirsutum* L.).

=> d bib abs 1 2 10

L1 ANSWER 1 OF 12 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
AN 1998:295609 BIOSIS  
DN PREV199800295609  
TI Callus induction, somatic embryoid formation and plant  
**regeneration** in **cotton** (*Gossypium hirsutum* L.).  
AU Rajasegar, G. [Reprint author]; Rangasamy, S. R. Sree; Venkatachalam, P.;  
Rao, G. R.  
CS Dep. Botany, National Univ. Singapore, Singapore-119260, Singapore  
SO Journal of Phytological Research, (1996) Vol. 9, No. 2, pp. 145-147.  
print.  
ISSN: 0970-5767.  
DT Article  
LA English  
ED Entered STN: 15 Jul 1998  
Last Updated on STN: 15 Jul 1998  
AB High frequency of callus induction and somatic embryogenesis was observed  
on MS medium containing various concentrations and combinations of  
different growth regulators. Among the various explants, young leaf was  
found to be best for maximum frequency of callus induction on MS medium  
fortified with NAA (2.0 mg/l) in combination with 2 iP (3.0 mg/l). These  
calli developed embryoids on MS medium-containing 2 iP and ABA (2.0 mg/l  
each) with 10 mM **glutamine**. Embryoids formed here developed  
into plantlets and plant **regeneration** frequency was low.

L1 ANSWER 2 OF 12 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
AN 1989:89777 BIOSIS  
DN PREV198987043913; BA87:43913  
TI PLANT **REGENERATION** FROM SOMATIC EMBRYOGENIC SUSPENSION CULTURES  
OF **COTTON** *GOSSYPIUM-HIRSUTUM* L.  
AU FINER J J [Reprint author]  
CS DEP AGRONOMY, OHIO AGRICULTURAL RES AND DEVELOPMENT CENTER, OHIO STATE  
UNIV, WOOSTER, OHIO 44691, USA  
SO Plant Cell Reports, (1988) Vol. 7, No. 6, pp. 399-402.  
CODEN: PCRPD8. ISSN: 0721-7714.  
DT Article  
FS BA  
LA ENGLISH  
ED Entered STN: 6 Feb 1989  
Last Updated on STN: 6 Feb 1989  
AB Maintainable, highly embryogenic suspension cultures of **cotton**  
(*Gossypium hirsutum* L. cv. 'Coker 310') have been obtained. Callus

cultures were initiated from cotyledonary tissues from aseptically-germinated seedlings. To establish the suspension cultures, callus tissue was placed in a liquid medium containing either 0.5 mg/l picloram or 0.1 mg/l 2,4-dichlorophenoxyacetic acid. For proliferation of the embryogenic suspension, 5 mg/l of 2,4-dichlorophenoxyacetic acid was used. Embryo development took place when the embryogenic tissue was transferred to an auxin-free liquid medium containing 15 mM **glutamine**. Early embryo development was fairly synchronous and large numbers of somatic embryos were produced. **Regenerated** plants were fertile and smaller than seed-derived plants.

L1 ANSWER 10 OF 12 CABA COPYRIGHT 2004 CABI on STN  
AN 97:103323 CABA  
DN 19971608342  
TI Somatic embryogenesis of an early **cotton** cultivar  
AU Gonzalez-Benito, M. E.; Carvalho, J. M. F. C.; Perez, C.  
CS Departamento de Biología Vegetal, ETSI Agronomos, Universidad Politécnica, 28040 Madrid, Spain.  
SO Pesquisa Agropecuaria Brasileira, (1997) Vol. 32, No. 5, pp. 485-488. 13 ref.  
ISSN: 0100-204X  
DT Journal  
LA English  
SL Portuguese  
ED Entered STN: 19970916  
Last Updated on STN: 19970916  
AB Cotyledon and hypocotyl explants of *Gossypium hirsutum* race *latifolium* cv. CNPA Precoce 2 were cultured on MS media supplemented with 5 concentrations of 2,4-D and isopentenyladenine (2iP) either alone or in combination. On the basis of the type of callus obtained, 4 growth regulator combinations were selected for further callus development. Callus was subcultured on medium containing 2.45 [ $\mu$ M] 2iP and subsequently transferred to media containing 0.45 then 22.5 [ $\mu$ M] 2,4-D. Somatic embryos of different sizes and shapes appeared subsequently on MS medium supplemented with 2 g **glutamine**/litre and no growth regulators. Plantlets were **regenerated** from these embryoids.

=> s ll and asparagine  
L2 3 Ll AND ASPARAGINE

=> d ti 1-3

L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
TI High-efficiency agrobacterium-mediated transformation of **cotton** using petiole explants  
L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Transgenic plants engineered for improved nitrogen metabolism/assimilation using vectors containing inducible promoters for recombinant expression of enzymes  
L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Carbon dioxide exchange and photosynthetic carbon metabolism in **cotton** leaves under conditions of depressed export of assimilates

=> d bib abs 2-3

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1997:568298 CAPLUS  
DN 127:215963  
TI Transgenic plants engineered for improved nitrogen metabolism/assimilation using vectors containing inducible promoters for recombinant expression of enzymes  
IN Good, Allen G.; Stroehner, Virginia L.; Muench, Douglas G.  
PA Governors of the University of Alberta, Can.; Good, Allen G.; Stroehner, Virginia L.; Muench, Douglas G.  
SO PCT Int. Appl., 44 pp.  
CODEN: PIXXD2

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9730163	A1	19970821	WO 1997-CA100	19970214
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,			

IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,  
MR, NE, SN, TD, TG

CA 2169502	AA	19970815	CA 1996-2169502	19960214
US 6084153	A	20000704	US 1996-599968	19960214
AU 9715868	A1	19970902	AU 1997-15868	19970214
AU 727264	B2	20001207		
GB 2325232	A1	19981118	GB 1998-17804	19970214
GB 2325232	B2	20001129		
GB 2349886	A1	20001115	GB 2000-23359	19970214
AU 760622	B2	20030522	AU 2001-24906	20010307
AU 2001024906	A5	20010510		
PRAI CA 1996-2169502	A	19960214		
US 1996-599968	A2	19960214		
AU 1997-15868	A3	19970214		
GB 1998-17804	A3	19970214		
WO 1997-CA100	W	19970214		

AB A genetic construct is disclosed which contains a nitrogen assimilation and/or metabolism enzyme coding sequence operably associated with an inducible promoter. Preferably, the promoter is inducible under conditions where it would be beneficial to take-up, store or use nitrogen. The promoter can be, for example, induced by the presence of a selected chemical agent, such as nitrate or other form of nitrogen, preferably by a nitrogenous fertilizer. Enzymes active in the assimilation and/or metabolism of nitrogen include, but are not limited to, **glutamine synthetase**, **asparagine synthetase**, glutamate synthase, asparaginase, glutamate dehydrogenase, aspartate aminotransferase, and alanine aminotransferase. This general method is exemplified by identification and sequence anal. of a *Brassica napus* osmotic stress-induced promoter of gene *btg-26* (*Brassica* turgor gene-26). Stress-induced nitrogen assimilation vector was then constructed using the *btg-26* promoter in conjunction with barley alanine aminotransferase cDNA to construct *pbtg-26/AlaAT/NOS*. Transgenic *Brassica* plants produced using *pbtg-26/AlaAT/NOS* had alanine aminotransferase activities 1.63- to 3.89-fold that of wild-type plants. These transgenic plants had faster growth rates, less senescence in lower leaves, and higher seed yields than wild-type when grown under nitrogen-starved/drought conditions.

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:213996 CAPLUS

DN 112:213996

TI Carbon dioxide exchange and photosynthetic carbon metabolism in **cotton** leaves under conditions of depressed export of assimilates

AU Rasulov, B. Kh.; Parnik, T.; Ivanova, Kh. N.; Keerberg, O.

CS Dep. Gen. Genet. Cotton, Dushanbe, USSR

SO Fiziologiya Rastenii (Moscow) (1990), 37(1), 12-21

CODEN: FZRSV; ISSN: 0015-3303

DT Journal

LA Russian

AB Photosynthetic and photorespiratory gas exchange, and photosynthetic C metabolism have been studied in **cotton** (*Gossypium hirsutum*) leaves. Restriction of assimilate export from the leaf by removal of all growth apices and bolls suppressed carboxylation and decreased the **regeneration** rate and pool size of ribulose bisphosphate. The relative rate of C incorporation into foliar amino and carboxylic acids increased, while the relative rate of C incorporation into glycolate cycle metabolites remained unchanged. Excess accumulation of assimilates in the photosynthetic cell depresses the glycolate cycle and coupled photorespiration in proportion to photosynthetic rate decrease.

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STN INTERNATIONAL SESSION SUSPENDED AT 13:24:52 ON 28 SEP 2004